

## 6540.0 - Microdata: Household Expenditure, Income and Housing, 2015-16

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## Summary

### Introduction

#### INTRODUCTION

This product provides information about the release of microdata from the Survey of Income and Housing (SIH) and Household Expenditure Survey (HES), Australia, 2015–16, which includes a Confidentialised Unit Record File (CURF) and a Detailed File available via the DataLab. Included is information about the following:

- Basic CURF
- The survey
- The microdata files and content
- An explanation of how to use the files
- The data item list
- The conditions of use and
- Information on the quality of the microdata.

Microdata are the most detailed information available from a survey and are generally the responses to individual questions on the questionnaire or data derived from two or more questions. This level of detail is released with the approval of the Australian Statistician.

#### Available Products

The following microdata products are available or planned for release from this survey:

- Basic CURF - datasets available on MicrodataDownload
- DataLab - approved users can access a remote desktop environment for in-depth analysis using a range of statistical software packages, available from late 2017.

The Expanded CURF, the use of the Remote Access Data Laboratory (RADL) and distribution of CURFs via CD-ROM have been discontinued for this collection, to be replaced by the Detailed File available through the DataLab. Several data items and additional detail previously only available on Expanded CURF will now be available on the Basic CURF.

Further information about these services, and other information to assist users in understanding and accessing microdata in general, is available from the Microdata Entry Page.

Before you apply for access, you should read and familiarise yourself with the information contained in the Responsible Use of ABS Microdata, User Guide (cat. no. 1406.0.55.003).

#### Apply for Access

To apply for access to the CURF, please register and apply at [How to Apply for Microdata](#).

To apply for access to the DataLab, please register at [How to Apply for Microdata](#) and contact [microdata.access@abs.gov.au](mailto:microdata.access@abs.gov.au) to arrange a session.

#### Further Information

Further information about the survey and the microdata product:

- Detailed list of data items for the CURF and DataLab are available from the Downloads tab.
- The Quality Declaration is available from the Explanatory Notes tab.
- Detailed information about the survey is available in the Household Expenditure Survey and Survey of Income

and Housing, User Guide, Australia, 2015-16 (cat. no. 6503.0).

- Other related information can be found within Household Income and Wealth, Australia, 2015-16 (cat. no. 6523.0) and Household Expenditure Survey, Australia: Summary of Results, 2015-16 (cat. no. 6530.0).
- For support in the use of this product, please contact Microdata Access Strategies on (02) 6252 7714 or via [microdata.access@abs.gov.au](mailto:microdata.access@abs.gov.au).
- The ABS Privacy Policy outlines how the ABS handles any personal information that you provide to us.

## About the Survey

### ABOUT THE SURVEY

The Survey of Income and Housing (SIH) and Household Expenditure Survey (HES) was conducted during 2015-16 to facilitate analysis and monitoring of the social and economic wellbeing of Australian households.

SIH collects statistical information about household income, wealth, housing characteristics, demographic and socio-economic characteristics, loans, and child care use and costs, and was last run in 2013-14. HES collects details of household expenditure on goods and services, financial stress and other expenditure related topics, and was last run in 2009-10.

The main statistical publications for SIH and HES are:

- Household Income and Wealth, Australia (cat. no. 6523.0); and
- Household Expenditure Survey, Australia (cat. no. 6530.0).

For more detailed information about HES and SIH, users may refer to the Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015-16 (cat. no. 6503.0). The HES and SIH 2015-16 User Guide includes information about the purpose of the survey, the concepts and contents, and the methods and procedures used to collect the data and derive the estimates.

The remaining sections in this product provide information that is specifically relevant to using microdata release files.

## File Structure

### FILE STRUCTURE

#### Record Level Types

The 2015-16 SIH and HES Basic CURF contain four levels of record files: Household, Income Unit, Person and Loans.

The detailed microdata file and TableBuilder includes more levels including the Superannuation, Childcare and Wealth.

Expenditure and COICOP levels are also included which contain information about weekly expenditure using the Household Expenditure Classification (HEC) and Classification of Individual Consumption by Purpose (COICOP) respectively in the Basic CURF and detailed microdata products. The definition of these classifications can be found in the Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015-16.

Different information is available for each record level.

The Household level includes information on:

- State or territory of usual residence
- Area of residence (Greater Capital City Area/Rest of state)
- Housing characteristics such as tenure type and housing costs
- Dwelling characteristics such as the number of bedrooms in the household
- Household type and composition such as the number of families in the household
- Household income
- Household Expenditure (HES households only)
- Fiscal Incidence Study (HES households only)
- Household childcare costs, benefits, rebates, number of hours of childcare
- Main source of income such as employee income or government pensions and allowances

- Household wealth
- Net imputed rent and gross imputed rent
- Information relating to the household reference person

The Income Unit level includes information on:

- Income unit income
- Source of income such as employee income or government pensions and allowances (as for household level)
- Weekly rent payments
- Income unit type such as couple with dependants or lone person
- Selected housing characteristics (including tenure type and landlord type)
- Child care use, costs and subsidies
- Demographic information

The Person level includes information on:

- Age
- Sex
- Marital status
- Relationship in household
- Country of birth
- Year of arrival in Australia
- Family type
- Income unit type such as couple with dependants or lone person (as for income unit level)
- Labour force details such as employment status and hours worked per week
- Occupation and industry
- Education status
- Education qualifications and education institution attending
- Income
- Source of income
- Barriers to labour force participation due to child care related reasons
- Carer payment and supplement
- Information on personal assets, accounts with financial institutions and offset accounts
- Fiscal Incidence Study (HES households only)
- Superannuation
- Disability, including type and severity

The Loans level contains information about the characteristics of each loan such as:

- Main purpose of loan such as housing or vehicle
- Characteristics of loan such as:
  - Security
  - Amount borrowed
  - Principal outstanding
  - Weekly repayment

These levels are only present in the DataLab product:

The Child care level contains information about the characteristics such as:

- Cost of care
- Type of care
- Child care rebate and benefit
- Income units

The Superannuation level contains information about the characteristics as:

- Age at which recipient receives regular income from account
- Type, value and duration of Superannuation account
- Income units

The Wealth level contains information about the characteristics as:

- Wealth value

The Household, Income Unit and Person levels are hierarchical: a person is a member of an income unit, which is a member of a household. The Loans, Wealth, Expenditure and COICOP levels are members of the household level. Superannuation are Child care members of the person level.

There are several identifiers on records at each level of the file. Weights are also included to enable population estimates. In the Basic CURF children under 15 years do not have their own person level record on the file. However, information on the number and ages of such children was collected and is included on the household and income unit level files. A complete list of the data items available on each record level is available from the Downloads tab.

## Record Counts

Table 1 below shows the number of records on each level of the 2015-16 SIH and HES Basic CURF. The number of records on the unconfidentialised file are also included in the table for comparison.

**2015-16 SIH and HES Basic CURF, RECORD COUNTS**

	SIH Basic no.	SIH Unconfidentialised no.	HES Basic no.	HES Unconfidentialised no.
Household	17,768	17,768	10,046	10,046
Income Unit	21,390	21,413	12,149	12,166
Person	33,913	33,968	19,218	19,254
Loans	10,992	10,992	5,894	5,894
Expenditure (HEC)	-	-	661,544	662,533
Expenditure (COICOP)	-	-	193,260	193,256

- nil or rounded to zero (including null cells)

## Data Items

### DATA ITEMS

The 2015-16 Household Expenditure Survey (HES) and Survey of Income and Housing (SIH) collected information using household and individual questionnaires.

The data item list includes record level items, populations and classification details. It contains the following fourteen worksheets:

- A Contents page with links to the different sections of the data item list
- Subject index, which includes both item descriptions and identifiers. It can be used to locate a variable by subject when the item name is not known
- Field index, showing item identifiers and numbers only. It is sorted alphabetically by item name, and presents a consolidated list of survey variables
- Household level data items, which provides a full listing of items that are output at Household level on the Basic CURF files
- Income unit level data items, which provides a full listing of items that are output at Income unit level on the Basic CURF files
- Person level data items, which provides a full listing of items that are output at Person level on the Basic CURF files
- Loans level data items, which provides a full listing of items that are output at Loans level on the Basic CURF files
- Expenditure (Household Expenditure Classification (HEC)) level data items, which provides a full listing of items that are output at expenditure level on the Basic CURF files (HES only)
- Expenditure (COICOP) level data items, which provides a full listing of items that are output at expenditure level on the Basic CURF files (HES only)
- Detailed categories for the Wealth classification
- Detailed categories for the Household Expenditure Classification (HEC)
- Detailed categories for the Classification of Individual Consumption According to Purpose (COICOP)
- References to other classifications used in the SIH and HES CURF
- Contents of the CURF

The data item list is available on the Downloads tab and contains information about the Basic CURF data items, and a comparison to data items on the detailed microdata files.

## **Basic CURF**

The Basic CURF contains information at Household, Income Unit, Person and Loan levels for HES and SIH, and the Expenditure and Classification of Individual Consumption According to Purpose (COICOP) levels for HES.

Users intending to purchase the Basic CURF should ensure the 2015-16 SIH and HES CURF product suits their data needs. Please review the data item list to see the topics and the level of detail that is available for the Basic CURF.

For confidentiality and/or usability reasons, some data item values have been collapsed and/or restricted for use on the microdata products. Additionally, data may have been masked on the Basic CURF to prevent identification of persons.

## **Detailed Microdata**

The Detailed microdata file available through DataLab contains information at Household, Income Unit, Person, Superannuation, Wealth, Child care and Loan levels for HES and SIH, and the Expenditure and Classification of Individual Consumption According to Purpose (COICOP) levels for HES.

Users intending to use the Detailed Microdata product should ensure the 2015-16 SIH and HES product suits their data needs. Please review the data item list to see the topics and the level of detail that is available for the detailed microdata files.

For further information about how to access Detailed Microdata refer to The Responsible Use of ABS Microdata, User guide.

## **NOTES ON SPECIFIC DATA ITEMS**

Many of the data items included on the CURF are self-explanatory. The Glossary in the Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015-16 (cat. no. 6503.0) provides links to terms and definitions for most of the survey's data items. However, some items that require further explanation are defined below.

### **Identifiers**

There are several identifiers on records at each level of the file.

Each household has a unique random identifier. This identifier appears on the household level (ABSHID), and is repeated on the income unit, person, loans, expenditure, and COICOP level records relating to that household.

Each family within the household is numbered sequentially. Non family members, single person households and persons in group households have a sequential "family number" commencing at 50. Family number (ABSFID) appears on the income unit level and the person level. The combination of household and family number uniquely identifies a family.

A family has one or more income units and each income unit within the family is numbered sequentially. Income unit number (ABSIID) appears on the income unit level and the person level. The combination of household, family and income unit number uniquely identifies an income unit.

An income unit has one or more persons and each person within the income unit is numbered sequentially. Person number (ABSPID) appears on the person level. The combination of household, family, income unit and person number uniquely identifies a person.

A household may have one or more loans and each loan within the household is numbered sequentially. Loan number (ABSLID) appears on the loans level. The combination of a household and loan number uniquely identifies a loan.

Expenditure units are identified by the expenditure number (ABSEID) and are classified according to the Household Expenditure Classification (COMCODE). COICOP units are identified by the COICOP number (ABSOID) and use the Classification of Individual Consumption According to Purpose (COICOP). Each are associated with a household unit, so the combination of a household and expenditure number uniquely identifies an expenditure unit, and similarly for a COICOP unit.

## Additional detail and data items on Basic CURF

A selection of data items and additional detail of high user interest on previous Expanded CURF are now available instead on the Basic CURF. These include:

- continuous age
- detailed occupation and industry codes
- detailed hours worked (individual hours) and duration of unemployment (individual weeks)
- separating NT and ACT
- detailed age and sex of children between the ages of 0 and 14 years, represented as counts on the income unit level

## Imputation flags

Imputation flags exist for each module in the questionnaire, rather than for specific data items. A value of 1 indicates partial imputation where at least one question in the module was imputed. Referring to the contents of the questionnaire module can provide an indication of whether particular data items may have included imputed data. The number of flags with a value of 1 for a particular record provides an indication of the extent of imputation in that record. Imputation flag variable names generally start with "IMP".

The 2015-16 Basic CURF uses an additional imputation flag for the HOURALL module to indicate when modelling was used to treat a survey instrument issue for hours worked in a second job.

## Multiple response data items

A number of topics in 2015-16 HES and SIH contain multiple response data items, including housing, child care, disability and superannuation. In these instances, respondents were able to select one or more response category within a question.

Using child care as an example, in these items the output data is multi-response in nature. Child care data items on the Basic CURF are:

Income unit level

- 'Types of formal child care income unit used in the last 4 weeks' (TYPFCIUA--TYPFCIUF)

Person level

- 'All reasons lack of child care prevents parent from working' (UNMET07A--UNMET07J)

These items capture multiple responses where a person provides more than one type of child care. The first response is captured in the first, or 'A', position (e.g. TYPFCIUA), and additional responses are in the second and then third and higher, or 'B' and 'C' and higher, positions (e.g. TYPFCIUB, TYPFCIUC). If only one response is possible, for example 'none of the above' then this response may also appear in the 'A' position. Where a data item does not apply, (e.g. an income unit does not use child care) then a value of 9 or 99 for 'Not applicable' will appear in the first position (e.g. TYPFCIUA). The 'Null response' (value of 0 or 00) is a default code and should be ignored. All of these categories should be used in analysis. For specific information on the number of item repeats and the category labels and values refer to the data item list available from the Downloads tab.

## Miscellaneous

- The subpopulation of Boarder persons (Tenure Type TENUREP = 7) do not at present have a Landlord Type assigned, which would usually be either 'Person living in the same household - Parent/other relative' (LNDLDIP = 3) or 'Person living in the same household - Other unrelated person' (LNDLDIP = 4). This issue affects the 2015-16 and 2013-14 cycles.

# Using the CURF

## USING THE CURF

## About the CURF

The 2015-16 SIH and HES Basic CURF contains information at Household, Income Unit, Person and Loan levels for HES and SIH, plus the Expenditure and Classification of Individual Consumption According to Purpose (COICOP) levels for HES. More information can be found at the File Structure section of this publication.

CURFs allow users to interact with survey data to their own, unique specifications. Uses include:

- Investigating data
- Producing tabulations
- Undertaking statistical analysis

While CURFs provide a great deal of flexibility, limitations on analysis can be impacted by factors such as sample size, the data classifications used, and conditions of use for the file.

More information on the additional detail and data items on Basic CURF can be found at the Data Item section of this publication.

## Protective Provisions

The 2015-16 SIH and HES CURF are released under the Census and Statistics Act 1905. The Act allows for the release of unit record data, provided this information is not likely to identify an individual person or organisation. As a result there are no names or addresses of survey respondents on the CURF. Other steps, including the following list of actions, have been taken to protect the confidentiality of respondents. The 2015-16 SIH and HES CURF contain unit records relating to most survey respondents.

Protective provisions include:

- On the Basic CURF, households with seven or more persons were reduced to a maximum size of six persons. This reduction also resulted in the deletion of several whole income units, mainly single person records.
- Most income items, and some wealth and loan data items have been protected using perturbation. During this process, selected item values are adjusted to prevent identification of survey participants while preserving the overall statistical validity of the data.
- Some variables have had values ranged or collapsed, or had maximum values reduced. The latter is a process called topcoding whereby all variable values that exceed a threshold value are reduced.
- For records with unusual combinations of characteristics, a household or person level item was changed to decrease the chance of identification. Details that were commonly changed include geography, age, country of birth, industry or occupation.

As a result of these protective measures, population estimates obtained from the CURF are slightly different to the other 2015–16 SIH and HES publications. Variation in key items and populations are addressed in the CURF sample reconciliation tabulations document available from the Downloads tab. These tables provide a guide to the difference between CURF and the unconfidentialised file, using indicators such as mean, median and population estimates.

Steps to confidentialise the datasets that are available on the CURFs are taken for three main purposes:

- Maintain the confidentiality of survey respondents
- Ensure the integrity of the datasets
- Maximise the value of survey content

Prospective users should first ensure that SIH and HES CURF product will suit their data needs. Prior to purchase, you can review whether the topics and level of detail you require are available on the 2015-16 SIH and HES Basic CURF. As an alternative measure, data that has been obtained in the SIH and HES but is not contained on the CURF files may be available via DataLab or a tailored service request to [client.services@abs.gov.au](mailto:client.services@abs.gov.au). The ABS Privacy Policy outlines how the ABS handles any personal information that you provide to us.

## Using the DataLab

**This document was added or updated on 14/12/2017.**

## USING THE DATALAB

The DataLab allows interactive (real time) access to microdata files from the Household Expenditure Survey (HES) and Survey of Income and Housing (SIH), through a portal to a secure ABS environment. The level of detail provided within DataLab exceeds that of the Basic CURF and provides researchers greater access to the data.

SIH detailed microdata from the 2015-16, 2013-14, 2011-12 and 2009-10 cycles, and HES detailed microdata from the 2015-16 and 2009-10 cycles are available via DataLab. The Data Item Lists for each of these cycles can be found at:

6540.0 Microdata: Household Expenditure Survey and Survey of Income and Housing, Australia, 2015-16

6553.0 Survey of Income and Housing, User Guide, Australia, 2013-14

6553.0 Survey of Income and Housing, User Guide, Australia, 2011-12

6503.0 Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2009-10

For further information about data available in this data series visit the [Available Microdata](#) webpage.

The Expanded CURF and the use of the Remote Access Data Laboratory (RADL) have been discontinued for this collection. Users are encouraged to consider DataLab as an improved mechanism to access detailed microdata.

### About the DataLab

Detailed microdata files on the DataLab can be accessed on-site at ABS offices or in a secure virtual environment from your own computer or networks. All unit record data remains in the DataLab environment, and any analysis results or tables are checked by the ABS before being provided to the researcher. More information about the DataLab can be found at the [About the DataLab](#) page.

The 2015-16 SIH and HES detailed microdata files contain information at Household, Income Unit, Person, Superannuation, Child care, Wealth and Loan levels for SIH and HES, plus the Expenditure and Classification of Individual Consumption According to Purpose (COICOP) levels for HES. More information about the detailed microdata files can be found at the [File Structure and Data Items](#) sections of this publication.

### DataLab Test File

A Test File has been created for the 2015-16 SIH and HES to enable researchers and analysts to become more familiar with the data structure, and to prepare code and programs prior to applying for, or commencing, a DataLab session. This aims to maximise the value of sessions by saving users time and resources once they enter the DataLab environment.

The Test File does not contain real data, and cannot be used for analysis. It mimics the structure of the microdata from the Collection as it has the same data items and allowed values. All data on the file is false, created through a randomisation process.

The Test File is available as a free download through the [Downloads](#) tab in csv format.

## Using the TableBuilder

### USING THE TABLEBUILDER

This page provides specific information relevant to the Survey of Income and Housing (SIH) TableBuilder product. It will assist users in understanding and interpreting specific data items and functions relevant to specific SIH estimates.

For general information relating to TableBuilder, or instructions on how to use features of the TableBuilder product, please refer to the [User Manual: TableBuilder](#).

Detailed information about the survey including scope and coverage, survey collection methodology, estimation method and reliability of estimates can be accessed from the [Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015-16 \(cat. 6503.0\)](#).

The Data Item List for the SIH TableBuilder product is available from 6540.0 - Microdata: Household Expenditure, Income and Housing, 2015-16, via the 'downloads' tab. Refer to 'SIH and HES 2015-16 Microdata Data Item List'.



## Continuous Data Items

The TableBuilder file contains a number of continuous data items that are available for selection from the **Summation Options** in the **Customise Table** panel. Continuous data items are those data items which can have a response value at any point along a numeric continuum. Examples of continuous data items include total current weekly household income from all sources, total value of household assets, and usual hours of child care per week. To create tables for continuous variables, the user must first create ranges. If sums, medians or means are required, the user then chooses the appropriate option and adds it to the 'wafer' or other parts of the table.

Only one continuous item can be in the 'wafer' at any one time in TableBuilder. A separate table needs to be created for each continuous item (one table per item with the relevant item in the 'wafer').

There are also continuous hybrid variables containing categories such as 'not applicable'. In these cases the variable can be found under 'Summation Options' and also under the appropriate level in the list of data items. Hybrid variables on the SIH file include:

- Debt-to-gross income ratio
- Debt-to-assets ratio
- Debt-to-disposable-income ratio
- Capacity of solar electricity power system (Number of kW of system)
- Household weekly feed-in tariff credited on electricity bill (selected dwelling)
- Number of weekly kilowatt hours (kWh) for which feed-in tariff credited on last paid bill.
- Year of Arrival
- Year repayments commenced for loan

For these continuous data items there are special codes allocated for certain responses (e.g. 9999 = 'Not applicable' or 99999999 = 'Negative or zero debt'). When creating ranges in TableBuilder for such continuous items, special codes will automatically be excluded from calculations of sums, means, medians or ranges. When added to the table, it enables comparisons across populations, ie. comparing households with a debt ratio to those without.

Limits for ranging continuous items are detailed in the Data Item List which can be accessed from 6540.0 - Microdata: Household Expenditure, Income and Housing, 2015-16 via the 'downloads' tab.

- Once a quantile, or range, has been created based on a continuous item, it can be found by selecting the ranges button (below summation options):



Below are TableBuilder outputs containing examples of data items with continuous hybrid variables:

Example 1: Debt-to-gross-income ratio - Number of households.

Columns: Debt-to-gross-income ratio.

Wafer: Number of households (default).

The number of households with a debt-to-gross-income ratio are contained in the 'A valid response was recorded' column. The 'Negative or zero debt' column includes households that do not have a debt, or that have a negative debt-to-income ratio. These instances are excluded from the calculation of Quintiles and Custom Ranges as shown in the tables below.

Debt-to-gross-income ratio			
Filters: Default Summation : Household #			
Wafers:			
Cell count, 3 (3 columns x 1 rows x 1 wafers) total.			
Debt-to-gross-income ratio	A valid response was recorded.	Negative or zero debt	Total
	6,593.6	2,368.8	8,963.3

Example 2: Debt-to-gross-income ratio - Ranged - Number of Households.

Columns: Debt-to-gross-income ratio.

Rows: Ranged debt-to-gross-income ratio.

Wafer: Number of households (default).

The 'Negative or zero debt' column includes households that do not have a debt or have a negative debt-to-income ratio (income is higher than debt). These instances are excluded from the calculation of Custom Ranges.

**Debt-to-income by Debt-to-gross-income ratio**

**Filters:**  
Default Summation : Household #

**Wafers:**  
Cell count, 27 (3 columns x 9 rows x 1 wafers) total.

Debt-to-gross-income ratio	A valid response was recorded.	Negative or zero debt	Total
Debt-to-income			
0 or less	2,889.5	0.0	2,889.5
More than 0 to 1	1,029.8	0.0	1,029.8
More than 1 to 2	914.6	0.0	914.6
More than 2 to 3	693.5	0.0	693.5
More than 3 to 4	336.8	0.0	336.8
More than 4 to 5	223.0	0.0	223.0
More than 5 to 6	111.9	0.0	111.9
More than 6	389.6	0.0	389.6
Total	6,593.6	0.0	6,593.6

Example 3: Mean gross income by Family composition of household for households with and without a debt ratio.

Wafer: Weighted mean of Total current weekly income from all sources (Household level).

Rows: Family composition of HH (brief).

Columns: Debt-to-gross-income ratio.

In this example the hybrid continuous variable (debt-to-gross-income ratio) is cross-tabulated with a categorical value (Family composition of HH (brief)). This will enable comparisons across populations, ie. comparing households with a debt ratio to those without. To demonstrate, the mean value of a continuous item (Total current weekly HH income from all sources) is added to the wafer, and the mean value for both columns is displayed. The 'not applicable' category is included in the calculation of the totals.

## Weighted mean of Total current weekly HH income from all sources by Family composition of HH (brief) by Debt-to-gross-income ratio

Wafers: Weighted mean of Total current weekly HH income from all sources + ▾ +

✕ Weighted mean of Total current weekly HH income from all sources

Cell count, 27 (3 columns x 9 rows x 1 wafers) total.

Debt-to-gross-income ratio	A valid response was recorded.	Negative or zero debt	Total
Family composition of HH (brief)			
Not applicable	0.0	0.0	0.0
Couple family with dependent children	3,103.5	2,852.2	3,082.5
One parent family with dependent children	1,623.6	973.0	1,428.1
Couple only	2,273.0	1,264.7	1,986.3
Other one family households	2,774.5	1,845.3	2,580.7
Multiple family households	3,414.5	2,802.8	3,324.0
Lone person	1,144.0	706.4	947.5
Group households	2,546.9	1,569.4	2,372.0
Total	2,414.0	1,262.6	2,108.9

**Note:** If continuous variable has a very limited range on the Data Item List between 0 and 0 then this means that there are too few contributor to this variable and therefore only estimates of weighted sum, weighted mean and weighted median can be derived and ranges cannot be created.

### Differences with published estimates based on the Survey of Income and Housing

Ranging continuous items will not provide the same output as published data which is based on the Survey of Income and Housing (ie. 6523.0 - Household Income and Wealth, Australia, and 4130.0 - Housing Occupancy and Costs, Australia). This could be due to additional confidentiality measures applied to ranged continuous items and rounding.

Quintile cut-offs in TableBuilder for continuous data items are defined according to whole numbers, whereas in published estimates they are defined according to two decimal places. This will cause slight variations between TableBuilder and published estimates based on the Survey of Income and Housing.

### Flag Items

Flag items have been created for low income households and low income households who pay rent. If performing analysis on duration of job search please use the 'labour force status' variable to only include people that are unemployed. Flags items also indicate modules in the questionnaire that have imputed data in them. If imputed values are to be removed from the analysis, this can be done by only including the 'not applicable' category. The data item list contains all the flag variables.

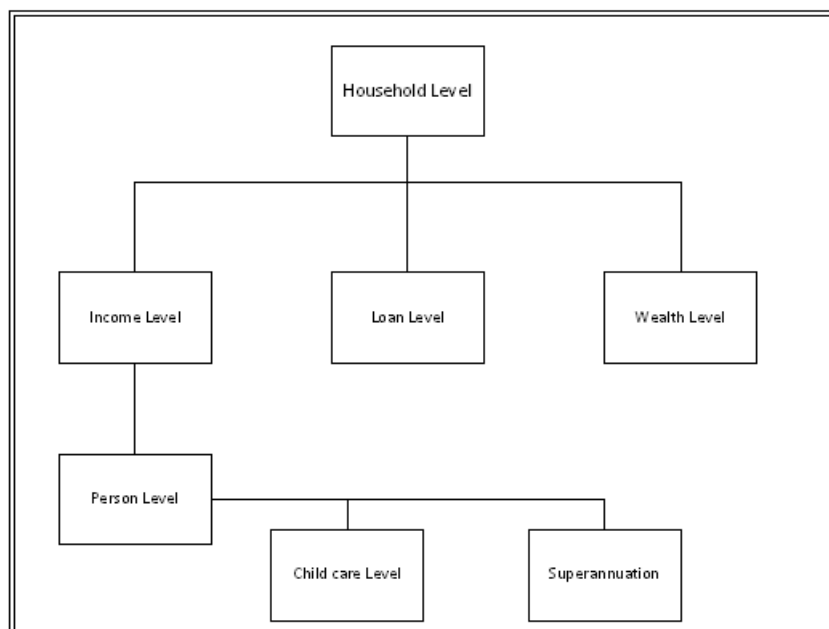
### File Structure

The 2015-16 SIH TableBuilder contains seven levels of record files: Household, Income Unit, Person, Childcare, Superannuation, Loans, and Wealth. Different information is available for each record level, and each level contains counts of the number of instances, or units, of the item in each category.

For example, if a person has more than one superannuation account, there will be multiple superannuation records for that person on the superannuation level.

Mortgage(s), motor vehicle loan(s), and personal loan(s) are all examples where a household may have multiple types of items, meaning there will be multiple records for that household on the Loans level.

The diagram below describes the relationships between the levels.



### Multi-Response Data Items

A number of questions included in the survey allows respondents to provide more than one response. The data items resulting from these questions are referred to as 'multi-response data items'.

The example below displays 'Types of formal child care income unit used in the last 4 weeks':

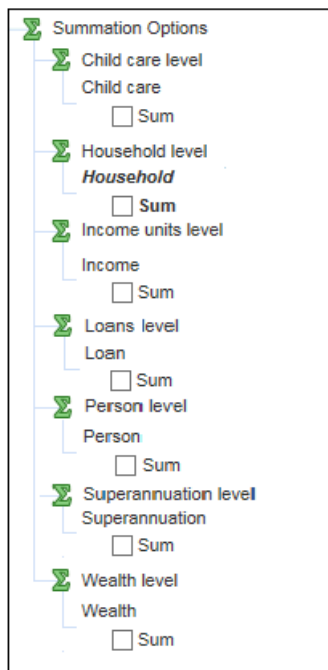
When a multi-response data item is tabulated, the same record is counted against each response provided. As a result, some household units utilising multiple forms of formal child care are counted multiple times. Consequently, the sum of individual multi-response categories can be different to the population or actual number of people applicable to the data item, as respondents are able to select more than one response.

Multi-response data items can be identified in the 6540.0 - Microdata: Household Expenditure, Income and Housing, 2015-16 data items list (available via the 'downloads' tab).

### Counting Units And Weights

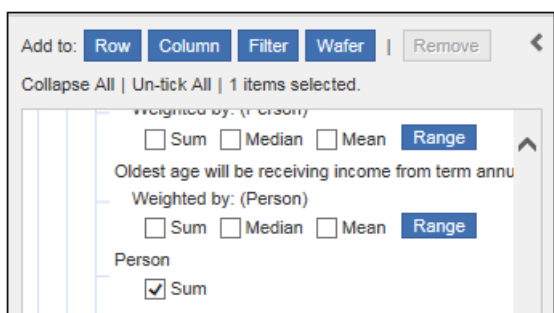
The **Summation Options** section in the **Customise Table** panel contains the counting units/weights that are available. It is critical that the correct weight (or summation option) is used when specifying tables for counts of persons or proportions. As a general rule of thumb, use the weight which corresponds to the level of analysis you are undertaking, ie household level weight with household level items, the person level weight with person level items. To analyse persons *in* households, use the person level weight with household level items.

The Household level weight is the default in SIH TableBuilder. The weights are located under the relevant level in the Summation Options. Below is a list of the levels and corresponding weights. To change the weight from the default, click on the "Sum" box in the appropriate level:



The default summation option will be automatically added to a table when the table is being specified, therefore care needs to be taken that this is the correct weight required for the particular tabulation. If the default weight is **not** the required weight, select the appropriate weight from the Summation Options list and add either to the 'filter' or the 'wafer' (either will override the default of household level in the 'filter'). This needs to be done when obtaining counts and proportions. It is not necessary (or possible) for tables which have a continuous item in the wafer.

For example, if analysing counts of persons for person level items, select 'Person - Sum' as shown below, and add to the 'wafer', before running the table.



## Weighting and defining quintiles

- Weighting quintiles.

Quintiles need to be weighted according to the corresponding level of the continuous item. For example, for quintiles based on 'Total current weekly HH income from all sources' (a Household level item), set the 'Equal distribution of ' box to 'Household level':

Range of Total current weekly HH income from all sources

Name

Custom Ranges **Quantile**

Number of ranges

Equal distribution of

Filter By:

- Household level
- Income units level
- Person level
- Loans level
- Child care level
- Wealth level
- Superannuation level
- Greater capital city areas & rest of state

Move

- Using the 'Filter by' option.

The 'Filter by' option enables quintiles to be defined further, according to a categorical variable.

To illustrate, in the example quintiles above, the quintiles for gross household income are based on the Australia wide population. This means that the entire population is divided into five equal sections and the quintile cut-offs will be based on the mean values for all households in Australia. Datacubes 17 to 24 in publication 6523.0 - Household Income and Wealth, Australia are state based, and the distributional analysis is also undertaken at the State level for these tables. This means that the quintiles are further defined by the relevant State.

To replicate this in TableBuilder, use the 'Filter by' to add the relevant State as in the following image:

Range of Total current weekly HH income from all sources

Name

Custom Ranges **Quantile**

Number of ranges

Equal distribution of

Filter By:

- Prev fin year HH income from own unincorporated business
- Quarter of interview
- Remoteness Area 2011
- Section of State 2011
- Sex of HH reference person
- Standard household type category
- State or Territory of usual residence 2011
  - ☒ New South Wales
  - ☐ Victoria
  - ☐ Queensland

Move

- Household level
  - State or Territory of usual residence 2011
    - ☒ New South Wales


This means that the quintiles will be based on the population for NSW only.

## Weighting equivalised items

Equivalised items are available at the household and the person level in TableBuilder. Equivalised items are household items which have been equivalised to take all persons in the household into account. All analysis using equivalised items in publication 6523.0 - Household Income and Wealth, Australia is done using the equivalised items on the person level with person weighting. Some equivalised analysis in publication 4130.0 - Housing Occupancy and Costs, Australia is done at the household level with household weighting.

Example 4: Mean equivalised disposable household income by equivalised disposable household income quintiles.

This example recreates a section of Table 5.4 in publication 6523.0 - Household Income and Wealth, Australia where mean equivalised disposable household income (EDHI) is used at the person level, with person level weighting on the income quintiles:

	A	B	C	D	E	F	G	H
1	 <b>Australian Bureau of Statistics</b>							
2	<b>65230DO005_201516 Household Income and Wealth, Australia: Summary of Results, 2015–16</b>							
3	Released at 11:30 am (CANBERRA TIME) 8 December 2017							
4	<b>Table 5.4 GROSS AND EQUIVALISED DISPOSABLE HOUSEHOLD INCOME, Equivalised disposable household income quintiles</b>							
5		EQUIVALISED DISPOSABLE HOUSEHOLD INCOME QUINTILE						Adjuste lowe incom quintile(
6		Lowest	Second	Third	Fourth	Highest	All households	
46	<b>MEAN WEEKLY EQUIVALISED DISPOSABLE HOUSEHOLD INCOME (\$)</b>							
47	<b>Main source of household income</b>							
48	Employee income	413	640	859	1,162	1,938	1,138	4:
49	Own unincorporated business income	355	631	845	1,183	2,189	923	4i
50	Government pensions and allowances	405	609	821	1,140	1,663	494	4;
51	Other income	270	642	854	1,150	2,622	1,174	3i
52	<b>Total (c)</b>	<b>388</b>	<b>632</b>	<b>856</b>	<b>1,162</b>	<b>2,009</b>	<b>1,009</b>	<b>4:</b>

## TableBuilder

1. Range 'Current weekly HH equivalised disposable income (Person level)' into quintiles and apply the person weight (Person level in the 'Equal distribution of' box). Select 'Create'.

Range of Current weekly HH equivalised disposable income (Person level)

Name

Custom Ranges    Quantile

Number of ranges

Equal distribution of

Filter By:

Household level
Income units level
Person level
Loans level
Child care level
Wealth level
Superannuation level
Greater capital city areas & rest of state

Move

Cancel    Next

2. Add the EDHI quintiles defined in step 2 to the columns via the 'Ranges' drop down box (below summation options) in the data item list.

3. Add 'Main source of current HH income' from the Household level categorical items to the rows.
4. Add 'Current weekly HH equivalised disposable income (Person Level)' - Mean - to the 'wafer'.
5. Select 'Retrieve Data'.

**Weighted mean of Current weekly HH equivalised disposable income (Person level) by Main source of current HH income by EDHI PN C**

Wafers: Weighted mean of Current weekly HH equivalised disposable income (Person level) + ✕ Weighted mean of Current weekly HH equivalised disposable income (Person level)

Cell count, 36 (6 columns x 6 rows x 1 wafers) total, 30 (5 columns x 6 rows x 1 wafers) displayed.

EDHI PN Quant	Quantile 1: -∞ to 523 (RSE 0.78%)	Quantile 2: 523 to 737 (RSE 0.796%)	Quantile 3: 737 to 987 (RSE 0.982%)
Main source of current HH income			
Household has zero or negative income	0.0	0.0	0
Employee income	413.3	640.8	860
Own unincorporated business income	355.2	631.4	845
Government pensions and allowances	406.2	611.1	819
Other income	270.9	642.2	855
Total	388.4	632.5	857

**Note:** Slight variations between TableBuilder and published estimates can occur due to rounding differences.

More information regarding the use of household or person weights for equivalised items is located in publication 6503.0 - Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015-16 (refer to the 'Summary indicators of income and wealth distributions' and the 'Weights' sections).

## Confidentiality

To minimise the risk of identifying individuals in aggregate statistics, a technique called perturbation is used in TableBuilder to randomly adjust cell values. Perturbation involves small, random adjustments to the statistics. It is considered the most satisfactory technique for avoiding the release of identifiable statistics while maximising the range of information that can be released. These adjustments have a negligible impact on the underlying pattern of the statistics. After Perturbation, a given published cell value will be consistent across all tables. However, adding up cell values to derive a total will not necessarily give the same result as published totals.

## Zero Value Cells

Tables generated from sample surveys will sometimes contain cells with zero values because there were no respondents who satisfied the parameters of the cell in the survey sample. There may, however, still be persons or households within the general population with these characteristics. If all persons within the population had been enumerated (ie. a Census), there may have well been a value for that cell. This is an example of sampling variability which occurs with all sample surveys. Relative Standard Errors (RSEs) cannot be generated for cells with zero values.

## Searching Data Items

It is possible to search for data items within TableBuilder using the search function below the data item list. Specific data item label can be used in the search box under summation options to find items quickly; the search will default back to displaying household level, but will be performed across all levels.

# Conditions of Use

## CONDITIONS OF USE

## USER RESPONSIBILITIES

The Census and Statistics Act 1905 includes a legislative guarantee to respondents that their confidentiality will be



protected. This is fundamental to the trust the Australian public has in the ABS, and that trust is in turn fundamental to the high quality of ABS information. Without that trust, survey respondents may be less forthcoming or truthful in answering our questionnaires. For more information, see 'Avoiding inadvertent disclosure' and 'Microdata' on our web page [How the ABS keeps your information confidential](#).

## **CONFIDENTIALITY**

In accordance with the Census and Statistics Act 1905, microdata are subjected to a confidentiality process before release. The release of microdata must satisfy the ABS legislative obligation to release information in a manner that is not likely to enable the identification of a particular person or organisation.

This confidentiality process is applied to avoid releasing information that may lead to the identification of individuals, families, households, dwellings or businesses.

## **CONFIDENTIALISED UNIT RECORD FILES (CURF)**

The Census and Statistics Act 1905 allows the Australian Statistician to approve release of unit record data. All CURFs released have been approved by the Statistician. Prior to being granted access to CURFs, each organisation's Responsible Officer must submit a CURF Undertaking to the ABS. The CURF Undertaking is required by legislation and states that, prior to CURFs being released to an organisation, a Responsible Officer must undertake to ensure that the organisation will abide by the conditions of use of CURFs. Individual users are bound by the Undertaking signed by the Responsible Officer.

All CURF users are required to read and abide by the conditions and restrictions in the Responsible Use of ABS Microdata, User Guide (cat. no. 1406.0.55.003). Any breach of the CURF Undertaking may result in withdrawal of service to individuals and/or organisations. Further information is contained in the [Consequences of Failing to Comply with a Microdata Undertaking](#) web page.

## **DATALAB**

Prior to using the DataLab users must agree to and sign an Undertaking and a Declaration of Compliance.

For more information on the DataLab, please refer to the [About the DataLab](#) page on the ABS Website.

## **CONDITIONS OF SALE**

All ABS products and services are provided subject to the ABS Conditions of Sale . Any queries relating to these Conditions of Sale should be emailed to [intermediary.management@abs.gov.au](mailto:intermediary.management@abs.gov.au).

## **PRICE**

Microdata access is priced according to ABS Pricing Policy and Commonwealth Cost Recovery Guidelines. For microdata prices refer to the [Microdata prices](#) web page.

## **APPLY FOR ACCESS**

To apply for access to microdata products, follow the registrations instructions which are available via the [Microdata Entry](#) page.

## **AUSTRALIAN UNIVERSITIES**

The ABS/Universities Australia Agreement provides participating universities with access to a range of ABS products and services. This includes access to microdata. For further information, university clients should refer to the [ABS/Universities Australia Agreement](#) web page.

## **FURTHER INFORMATION**

The [Microdata Entry](#) page on the ABS website contains links to microdata related information to assist users to understand and access microdata. For further information users should email [microdata.access@abs.gov.au](mailto:microdata.access@abs.gov.au) or

telephone (02) 6252 7714.

## About this Release

This publication describes the microdata products for the Survey of Income and Housing (cat. no. 6523.0) and the Household Expenditure Survey (cat. no. 6530.0) for 2015-16.

## History of Changes

**This document was added or updated on 27/10/2017.**

**01/08/2018:** TableBuilder is re-released and these additional data items were included:

- Amount of mortgage outstanding
- Amount owing on mortgages and unsecured loans for housing purposes only
- Current financial year total paid-out unused leave (to date of interview)
- Current financial year total redundancy pay (to date of interview)
- Current financial year workers' compensation lump sum (to date of interview)
- Current weekly HH private income (including overseas pensions)

Minor changes have been made for the following data items on the 'Person' or 'Household' level tabs:

- Total current weekly income from government pensions and allowances
- Total current weekly HH income from all sources
- Total current weekly HH income from all sources (2005-06 basis)
- Weekly household private income (incl imputed rent net of STIK)
- Weekly household private income (incl imputed rent)
- Whether someone in the household aged 15 and over has a disability or long-term health condition
- Landlord Type - Person

**29/06/2018:** Fiscal Incidence Study data items included in the microdata products: CURF and DataLab

Minor changes have been made for the following data items on the 'Person' or 'Household' level tabs:

- Total current weekly income from government pensions and allowances
- Total current weekly HH income from all sources
- Total current weekly HH income from all sources (2005-06 basis)
- Weekly household private income (incl imputed rent net of STIK)
- Weekly household private income (incl imputed rent)
- Whether someone in the household aged 15 and over has a disability or long-term health condition
- Landlord Type - Person

**20/04/2018** - TableBuilder released. See Using the TableBuilder page for more details.

**14/12/2017** - Update to the Using the DataLab page to describe further releases of detailed microdata for SIH and/or HES for 2009-10, 20011-12 and 2013-14 cycles in DataLab .

**28/11/2017** - Minor formatting amendments for pages Introduction, File Structure and Data Items.

**24/11/2017** - Detailed microdata released into the DataLab. See new page Using the DataLab.

**27/10/2017** - Minor formatting amendments for pages Conditions of Use, Data Items and Data Items List attachment.

**25/10/2017** - Basic CURF released via Microdata Download.

## Explanatory Notes

# Quality Declaration

## QUALITY DECLARATION

### INSTITUTIONAL ENVIRONMENT

Survey of Income and Housing (SIH) and Household Expenditure Survey (HES) are released as a Confidentialised Unit Record File (CURF) and as a Detailed File in the DataLab.

Microdata files are released in accordance with the conditions specified in the Statistics Determination section of the Census and Statistics Act 1905. This ensures that confidentiality is maintained whilst enabling micro level data to be released. More information on the confidentiality practices associated with microdata can be found at:

- For CURFs: About CURF Microdata page.
- For DataLab: About the DataLab page.

For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

### RELEVANCE

The Survey of Income and Housing (SIH) collects detailed information on income, wealth, housing, characteristics of individuals, income units and households from a sample of private dwellings throughout Australia. The Household Expenditure Survey (HES) collects detailed information on household expenditure from residents in private dwellings throughout Australia. The HES is collected jointly with the Survey of Income and Housing (SIH) every six years - that is, all households selected for HES also complete the SIH - which collects information about household income, wealth, housing and other characteristics.

Income and wealth data are used by economic and social analysts and policy makers to:

- understand the distribution of economic resources among private households in Australia;
- identify households most at risk of experiencing economic hardship; and
- understand the effects of taxation and welfare payments on people and families.

Housing data are used for:

- housing affordability studies;
- analysis of housing conditions and occupancy, including levels of home ownership and housing utilisation; and
- tracking changes in housing costs by tenure type over time.

HES and the jointly collected SIH data are used by economic and social analysts and policy makers to:

- understand the distribution of economic resources among private households in Australia;
- identify the changes occurring in Australians' spending habits;
- identify households most at risk of experiencing economic hardship;
- understand the effects of taxation and welfare payments on the cost of living for people and families; and
- The ABS also uses the HES data in the production of the Consumer Price Index and National Accounts.

### TIMELINESS

The SIH is conducted every two years and the HES is jointly conducted every six years. The 2015–16 SIH and HES collected information over the period July 2015 to June 2016.

SIH was last collected as a standalone cycle in 2013-14. SIH and HES were last collected together in 2009-10.

The first results from both SIH and HES 2015-16 were released on 13th September 2017, just over one year from the end of data collection. The next SIH is currently being conducted for the 2017-18 financial year. The next combined SIH and HES will be conducted in the 2021-22 financial year.

### ACCURACY

The microdata contains unit record level data from the SIH and HES. Key findings from the surveys are available from:

- Household Income and Wealth, Australia, 2015-16 (cat. no. 6523.0); and
- Household Expenditure Survey, Australia: Summary of Results, 2015-16 (cat. no. 6530.0).

Users are reminded that the microdata, as with the published estimates, are sample data. Users are advised to:

- use the sample weights to ensure estimates represent the population correctly;
- produce and use Relative Standard Errors (RSE's) when interpreting the precision of estimates;
- take note of the survey scope which covers residents of Private Dwellings in all areas except Very Remote Areas of Australia.

Steps are taken to confidentialise the data made available on the microdata files in a way that maximises the usefulness of the content while maintaining the confidentiality of respondents selected in the survey. As a result, it may not be possible to exactly reconcile all the statistics produced from the microdata with other published statistics. Further information about the steps taken to confidentialise the SIH and HES microdata is available through [How The ABS Keeps Your Information Confidential](#).

## **COHERENCE**

Each cycle of the SIH and HES collects comparable information to allow for analysis of changes over time.

For more information on the changes to SIH and HES over time, please refer to the Historical Information section in the Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015–16 (cat. no. 6503.0).

The Basic CURF data item list can be found on the Downloads tab. This data item list includes variable comparisons with previous SIH and HES CURFs, lists of new items, items no longer included, and a list of items which have had minor changes (e.g. changes to data item labels or categories).

Further information about the steps taken to confidentialise the microdata is available through the Responsible Use of ABS Microdata, User Guide (cat. no. 1406.0.55.003).

## **INTERPRETABILITY**

The information within this product should be referred to when using the microdata. It contains information including survey methodology, file structure, using the CURF and using the DataLab, conditions of use and the data item lists.

Further information can be found in Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015–16 (cat. no. 6503.0).

## **ACCESSIBILITY**

Microdata products are available to approved users. Users wishing to access SIH and HES microdata should familiarise themselves with information available via the [Microdata Entry Page](#).

The SIH and HES 2015-16 microdata can be accessed using a Basic CURF or DataLab.

CURF Access Modes and Levels of Detail contains general information on different types of CURF access. A full list of available microdata can be viewed via [Expected and available Microdata](#). The SIH and HES Basic CURF can be accessed on [MicrodataDownload](#). If questions remain please phone microdata access on (02) 6252 7714.